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EXAMINER

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

DETAILED ACTION

Response to Arguments

Applicant's arguments filed 06/02/2008 have been fully considered but they are not persuasive.

At pages 10-11, Applicant argues that the combination of Kojima et al. and Enari, as proposed in the Office Action, is improper and that such a combination would be unable to accomplish its intended goal. In response, the Examiner respectfully disagrees. Let's take claim 1 as an example. As described in the Office Action, the Examiner has clearly pointed out that Kojima does disclose every single limitation recited except for one single thing and that is the only different between the teachings of Kojima and the current invention: in Kojima, the event that occurs during the transmission so as to change the encoding scheme of the image signal is a scene change while it is an issuance of a recording instruction in the current event. The goal of Enari discloses such an event to be an issuance of a recording instruction. More specifically, when a recording instruction is issued, the complete frame right after the issuance is intra-frame encoded as shown in Fig. 5(a) and Fig. 5(b) of Enari. Now if one of ordinary skill in the art would have been motivated to modify or incorporate to use the teachings of Enari as said above into the teachings of Kojima, the combined teachings completely disclose every limitation recited in the claims.

First, the Examiner respectfully submits that the combination is perfectly proper for the following reasons: the individual teachings are very similar to each other in dealing with providing good quality pictures or images after either a scene change or a

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recording start. Also, in many circumstances, the stream that starts from a new recording is very likely to be a scene change. For instance, the very first recording is a scene change by itself from nothing to the very first image of the video. Now if the user stop the recording for some period to skip some unwanted segments to one of his or her favorite scenes, he starts recording again. This action highly likely yields a scene change in the recorded stream. Furthermore, it is a good motivation to have a high compression ratio with high quality as well. In both Kojima and Enari, the picture right after the event (either a scene change or a recording start) is selected to be intra-frame encoded. It is very clear to one of ordinary skill in the art why this technique yields good quality compressed data. It is because it removes the dependency of the following frames to any reference frame before the event occurs and change the dependency to a frame that is completely within the segment produced between the start of event and end of event.

Also, in contrast with Applicant's arguments that such a combination would be unable to accomplish its intended goal, the Examiner respectfully submits that that is not the case. First, the intended goal of Kojima is to prevent quality from being degraded at scene change. With the features disclosed by Enari incorporated, the apparatus, besides able to prevent picture from being degraded at scene change, now can also prevent picture from being degraded at recording points as well. Or the apparatus of Kojima can be modified using the teachings of Enari to achieve a different goal that is useful in a different circumstance. It does not make sense to combine Enari and modify Kojima to expect a same original result as already achieved by Kojima. The

important question is whether when combined, the teachings of Kojima and Enari can yield a better or improved result in one way or another. In this case, the answer to that question is yes for the reason described above.

At pages 11-12, Applicant argues that, even if it would be permissible to combine Kojima and Enari, such combination would merely result in the Kojima system performing intra-frame-encoding of all frames until an instruction to start recording is input, and thereafter intraframe-encoding a frame occurring immediately after the instruction to start recording and interframe prediction-encoding frames following the frame immediately after the instruction to start recording. In response, the Examiner respectfully disagrees. One of ordinary skill in the art would recognize that combining Enari into Kojima would at least result a system that has a high compression ratio with high quality at least for recorded segments. In both Kojima and Enari, the picture right after the event (either a scene change or a recording start) is selected to be intra-frame encoded to produce good quality compressed data because it removes the dependency of the following frames to any reference frame before the event occurs and change the dependency to a frame that is completely within the segment produced between the start of event and end of event. As such, the combined teachings does clearly disclose the limitation of "controlling the encoding means and the recording means in accordance with an instruction to start a recording operation, issued during transmission of the encoded image signal by the transmission means, so as to change a number of intraframe-encoded pictures included in one picture group without changing a number of frames included in one picture group when the instruction to start the recording

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operation is issued, so that a number of intraframe-encoded pictures included in each picture group generated after issuance of the instruction to start the recording operation is smaller than a number of intraframe-encoded pictures included in each picture group generated before the issuance of the instruction to start the recording operation," as recited in claim 1.

At page 12-13, Applicant argues that the Examiner has used hindsight in combining Kojima with Enari. In response, the Examiner respectfully submits that, for the reasons discussed above, this is clearly not the case.

In summary, the combination of Kojima and Enari as proposed by the Office Action is proper. This combination discloses every limitations of the claimed invention. Therefore, the claims are rejected as previously presented.

/Thai Tran/

Supervisory Patent Examiner, Art Unit 2621